Warning: Refer to current foreign charts and flight information publications for information within foreign airspace

L-34 PANELS EFGHIJ 1"=7 NM

L-33

PANELS ABCD 1"=7 NM

UNITED STATES GOVERNMENT
FLIGHT INFORMATION PUBLICATION

IFR ENROUTE LOW ALTITUDE - U.S.

For use up to but not including 18,000' MSL
HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983

EFFECTIVE 0901Z **29 JUL 2010**

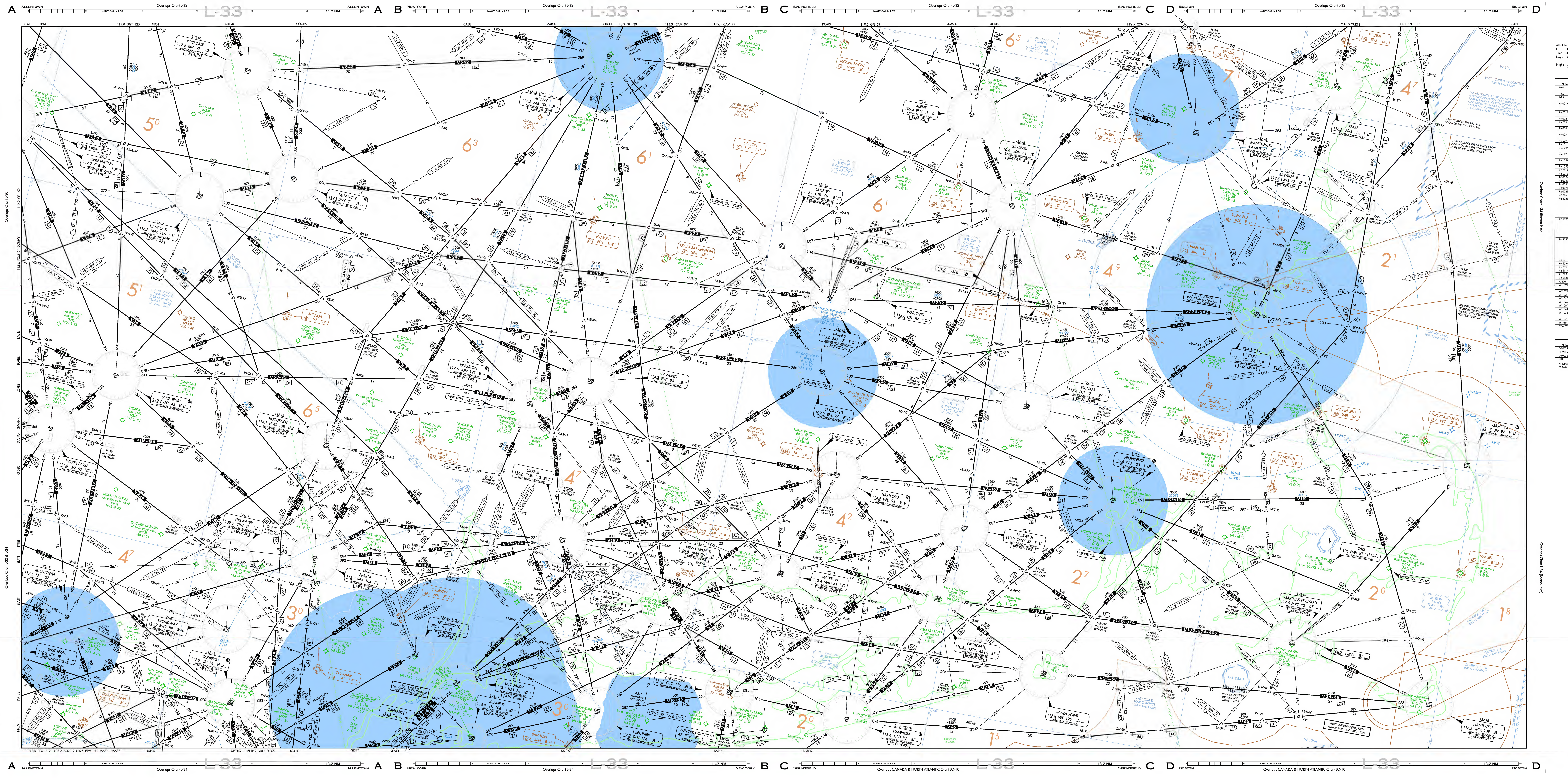
TO 0901Z **23 SEP 2010**

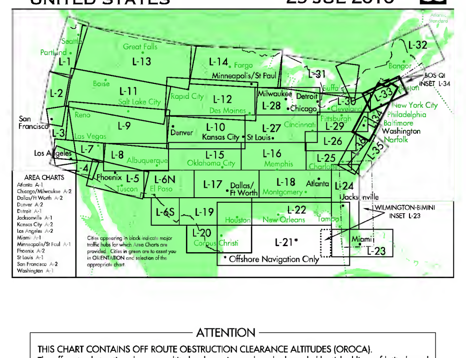
Consult NOTAMs for latest Information

PUBLISHED IN ACCORDANCE WITH INTERAGENCY AIR CARTOGRAPHIC COMMITTEE SPECIFICATIONS AND AGREEMENTS APPROVED BY
DEPARTMENT OF DEFENSE ★ FEDERAL AVIATION ADMINISTRATION

MILITARY TRAINING ROUTES

NUMBER	ALTITUDE RANGE	NUMBER	ALTITUDE RANGE	NUMBER	ALTITUDE RANGE
IR-714	SURFACE TO 6000	IR-720	5000 TO 8000	IR-760	SURFACE TO 6000





ATTENTION

THIS CHART CONTAINS OFF ROUTE OBSTRUCTION CLEARANCE ALTITUDES (OROCA).
The off route obstruction clearance altitudes shown in quadrangles bounded by ticked lines of latitude and longitude are represented in THOUSANDS and HUNDREDS of feet above mean sea level. The OROCA is based on information available concerning the highest known features in each quadrangle, including terrain and obstructions. OROCA provides obstruction clearance with a 1000 foot buffer in designated non-mountainous areas and a 2000 foot buffer in designated mountainous areas within the United States. For areas in Mexico and the Caribbean which are located outside of the U.S. ADIZ, OROCA provides obstruction clearance with a 3000 foot buffer. This altitude is provided for obstruction clearance only. It does not provide for NAVAID signal coverage or communication coverage, and would not be consistent with altitudes assigned by Air Traffic Control.

Example: 12,500 feet 12⁵

CORRECTIONS, COMMENTS, AND/OR PROCUREMENT

FOR RECOMMENDATIONS REGARDING FORMAT AND CONTENT CONTACT:
FAA, Aeronautical Information Services, AJR-321
800 Independence Ave., S.W.,
Washington, D.C. 20591
Online at http://nfdc.faa.gov
Email 9-AWA-ATOR-AIS-feedback@faa.gov
Telephone 1-866-295-8236

FOR CHARTING ERRORS CONTACT:
FAA, National Aeronautical Navigation Services, ATO-W
SSMC-4, Sta. # 4259
1305 East-West Highway
Silver Spring, MD 20910-3281
Telephone 1-800-626-3677
Email 9-AMC-Aerochart@faa.gov

FOR PROCUREMENT CONTACT:
FAA, National Aeronautical Navigation Services
Distribution Team, ATO-W
10201 Good Luck Road
Glenn Dale, MD 20769-9700
Online at http://AERONAV.FAA.GOV
Email 9-AMC-Chartsales@faa.gov
Tel. 1-800-638-8972 Fax 301-436-6829
or any authorized chart agent

MILITARY
For Corrections Information, See Chapter 11 of General Planning (GP). For Procurement refer to DOD Catalog of Aeronautical Charts and Flight Information Publications.

Frequently asked questions (FAQ) are answered on our web site at http://AERONAV.FAA.GOV.
See the FAQs prior to contact via toll free number or email.

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EFF. DATE 10210

ARTCC three letter idents. Albuquerque ZAB, Atlanta ZTL, Boston ZBW, Chicago ZAU, Cleveland ZOB, Denver ZDV, Fort Worth ZFW, Houston ZHU, Indianapolis ZID, Jacksonville ZJX, Kansas City ZKC, Los Angeles ZLA, Memphis ZME, Miami ZMA, Minneapolis ZMP, New York ZNY, Oakland ZOA, Salt Lake City ZLC, Seattle ZSE, Washington ZDC

P - PROHIBITED, R - RESTRICTED, A - ALERT, W - WARNING AREAS
CANADA: CYA - ADVISORY, CYD - DANGER, CYR - RESTRICTED AREAS

All altitudes are MSL unless otherwise indicated
FL — Flight Level
Time — Hours shown are UTC unless otherwise indicated
Days — Sunrise to Sunset except Canada where it means 1/2 hr before sunrise to 1/2 hr after sunset
Nights — Sunset to Sunrise except Canada where it means 1/2 hr after sunset to 1/2 hr before sunrise
Cont — Continuous 24 hrs a day, 7 days a week
‡ — During periods of Daylight Saving Time (DT) effective hours will be one hour earlier than shown.
NOTAM — Use of this term in Restricted Areas indicates FAA And DoD NOTAM systems. Use of this term in all other Special Use areas indicates the DoD NOTAM system.

SPECIAL USE AIRSPACE

NUMBER	EFFECTIVE ALTITUDE	TIMES USED, UTC DAYS	HOURS	WEATHER	CONTROLLING AGENCY A/G CALL	PANEL
P-40	To But Not Including 5000	Cont	Cont	VFR-IFR	No A/G	F
P-56	To 18000	Cont	Cont	VFR-IFR	No A/G	E
P-73	To But Not Including 1500	Cont	Cont	VFR-IFR	No A/G	E
R-4001A	Unlimited To 10000 Higher By NOTAM	Cont Cont By NOTAM	1200-0500Z‡ 0500-1200Z‡ By NOTAM	VFR-IFR	ZDC CNTR/FSS	F
R-4001B	To 10000 Higher By NOTAM	Intermittent By NOTAM	Intermittent By NOTAM	VFR-IFR	ZDC CNTR/FSS	F
R-4002	To 20000	Cont *1	Sunrise To 0500Z‡	VFR-IFR	ZDC CNTR/FSS	F
R-4005	To But Not Including FL 250	Cont *1	1200-0400Z‡	VFR-IFR	ZDC CNTR/FSS	E,F
R-4006	3500 To But Not Including FL 250	Cont *1	1200-0400Z‡	VFR-IFR	ZDC CNTR/FSS	E,F
R-4007	To But Not Including 5000	Cont *1	1200-0400Z‡	VFR-IFR	ZDC CNTR/FSS	E,F
R-4009	5000 To 12500	Cont	Cont	VFR-IFR	ZDC CNTR/FSS	F
R-4101	To 9000	Cont *1	1100-2300Z‡	VFR-IFR	FAA, CAPE APP CON	D,J
R-4102A	To But Not Including 2000	Sat *1	1300-0300Z‡	VFR-IFR	FAA, BOSTON APP CON	C,J
R-4102B	2000 To 3995	Sat *1	1300-0300Z‡	VFR-IFR	FAA, BOSTON APP CON	C,J
R-4105A	To But Not Including 10000	Cont *1	Days	VFR-IFR	FAA, CAPE APP CON	D
R-4105B	10000*3	Cont *1	Days	VFR-IFR	FAA, CAPE APP CON	D
R-5001A	To 4000	Cont *1	1100-0430Z‡	VFR-IFR	ZNY CNTR/FSS	G
R-5001B	4000 To 8000	Sunrise Fri To Sunset Sun *1		VFR-IFR	ZNY CNTR/FSS	G
R-5002A	To 14000	Cont *1	Days	VFR-IFR	ZNY CNTR/FSS	G
R-5002B	1000 To 14000	Cont *1	Days	VFR-IFR	ZNY CNTR/FSS	G
R-5002C	To 3000	Cont *1	Days	VFR-IFR	ZNY CNTR/FSS	G
R-5002D	To 4000	Cont *1	Days	VFR-IFR	ZNY CNTR/FSS	G
R-5002E	3500 To 14000	Cont *1	Days	VFR-IFR	ZNY CNTR/FSS	G
R-5206	To 5000	7/1-8/31 *1	1100-0500Z‡	VFR-IFR	NEW YORK APP CON	B,H,I
R-5802B	To 13000	9/1-5/10 9/1-12/15 Sat Sun 5/11-8/31 Sat Sun-Fri *1	1300-0400Z‡ 1300-1700Z‡ 1300-0500Z‡ 1300-0100Z‡	VFR	ZNY CNTR/FSS	G
R-5802C	500 AGL To But Not Including 17000	2/15-5/10 9/1-12/15 Sat Sun 5/11-8/31 Sat Sun-Fri *1	1300-0400Z‡ 1300-1700Z‡ 1300-0500Z‡ 1300-0100Z‡	VFR-IFR	ZNY CNTR/FSS	G
R-5802D	17000 To But Not Including FL 220	2/15-5/10 9/1-12/15 Sat Sun 5/11-8/31 Sat Sun-Fri *1	1300-0400Z‡ 1300-1700Z‡ 1300-0500Z‡ 1300-0100Z‡		ZNY CNTR/FSS	G
R-6601	To 5000	Cont *1	1200-0400Z‡	VFR-IFR	FAA, POTOMAC TRACON	E
R-6608A,B,C	To 40000	Cont	1000-0500Z‡	VFR-IFR	FAA, POTOMAC TRACON	E
R-6609	To FL 200	Cont *1	1300-0400Z‡	VFR-IFR	ZDC CNTR/FSS	E
R-6611A	To 40000	Mon-Fri *1	1100-0400Z‡	VFR-IFR	ZDC CNTR/FSS	E
R-6612	To 7000	Mon-Fri *1	1300-2200Z‡	VFR-IFR	ZDC CNTR/FSS	E
R-6613A	To 40000	Mon-Fri *1	1300-2200Z‡	VFR-IFR	ZDC CNTR/FSS	E
A-220	To 7000	Cont	1300-0300Z‡	VFR	No A/G	G,H
W-102 HIGH	From But Excluding 17000 To FL 600	Intermittent	By NOTAM	VFR-IFR	ZBW CNTR/FSS	J
W-102 LOW	To 4000	Intermittent	By NOTAM	VFR-IFR	ZBW CNTR/FSS	J
W-103	To 2000	Intermittent	By NOTAM	VFR-IFR	ZBW CNTR/FSS	D,J
W-104A	To 40000	Intermittent	By NOTAM	VFR-IFR	ZBW CNTR/FSS	D,J
W-104A	*2	Intermittent	By NOTAM	VFR-IFR	ZBW CNTR/FSS	D,J
W-105A	To FL 500	Intermittent	By NOTAM	VFR-IFR	ZBW CNTR/FSS	D,J
W-106A	To 3000	Intermittent	By NOTAM	VFR-IFR	ZBW CNTR/FSS	H,J
W-107B	To But Not Including 2000	Intermittent	By NOTAM	VFR-IFR	ZNY CNTR/FSS	G,H
W-107C	*2	Intermittent	By NOTAM	VFR-IFR	ZDC CNTR/FSS	G,H
W-386	UNLTD	Intermittent	By NOTAM	VFR-IFR	ZDC CNTR/FSS	E
CYA 752	To FL 280	Mon-Fri *1	Days	VFR-IFR	CZQM ACC	J

MILITARY OPERATIONS AREAS

NUMBER	EFFECTIVE ALTITUDE	TIMES USED, UTC DAYS	HOURS	WEATHER	CONTROLLING AGENCY A/G CALL	PANEL
DEMO 1	500 To 5000	Intermittent	By NOTAM	VFR-IFR	FAA, POTOMAC TRACON	E
DEMO 2	10000 To 15000	Intermittent	By NOTAM	VFR-IFR	FAA, POTOMAC TRACON	E
DEMO 3	ABOVE 5000 To 15000	Intermittent	By NOTAM	VFR-IFR	FAA, POTOMAC TRACON	E
HILL	To 3000	Cont	Days	VFR-IFR	FAA, POTOMAC APP	F

*1 Other Times By NOTAM
*2 To But Not Including FL 180
*3 To But Not Including 18000

AIRPORT LOCATIONS

NAME	ID	PANEL	NAME	ID	PANEL	NAME	ID	PANEL
A P Hill AAF	APH	E	Harrisburg Intl	MDT	G	Pottstown Muni	N47	G
Aeroflex-Andover	12N	A,H	Hartford-Brainard	HFD	C,I	Powhatan Pvt	VA57	E
Airlie Pvt	2VA9	E	Hawthorne-Feather	8B1	C	Princeton	39N	H
Albany Intl	ALB	B,I	Hazleton Muni	HZL	G	Provincetown Muni	PVC	D
Alexandria	N85	A,H	Hopedale Industrial	1B6	C,J	Quakertown	UKT	A,G
Allentown Queen City	XLL	A,G	Hummel Fld	W75	E	Quantico MCAF	NYG	E
Andrews AFB	ADW	F	Igor I Sikorsky Mem	BDR	B,I	Quonset State	OQU	C
Atlantic City Intl	ACY	G	Inductotherm Pvt	3NJ6	G	Randall	Ø6N	A,H
Baltimore/Washington	BWI	F	Jaffrey Arpt-Silver	AFN	C	Reading Rgnl/Carl A	RDG	G
Barnes Muni	BAF	C,J	Jake Arner Mem	22N	G	Red Lion	N73	G
Barnstable Muni	HYA	D	John F Kennedy Intl	JFK	B,H	Republic	FRG	B,H
Bay Bridge	W29	F	Joseph Y Resnick	N89	B,I	Richmond Intl	RIC	E
Beverly Muni	BVY	D	Josephs Pvt	DE49	F	Ridgely Arpk	RJD	F
Blairstown	1N7	A,H	Kingston-Ulster	2ØN	B,I	Robert J Miller Air	MJX	G
Black Island State	BID	C	Kroelinger	29N	G	Robertson Fld	4B8	B,J
Boire Fld	ASH	C	Kutztown	N31	G	Rockville Pvt	ØVA5	E
Braden Arpk	N43	A,H	La Guardia	LGA	B,H	Ronald Reagan	DCA	F
Bradley Intl	BDL	C,I	Lakehurst NAES	NEL	G	Salisbury-Ocean City	SBY	F
Brandywine	OQN	G	Lakewood	N12	H	Seamans Fld	9N3	A
Brookhaven	HWV	B,I	Lancaster	LNS	G	Shannon	EZF	E
Calverton Exec Arpk	3C8	B,I	Laurel	NØ6	F	Sidney Muni	N23	A
Cambridge-Dorchester	CGE	F	Laurence G Hanscom	BED	D,J	Sikorsky Pvt	JSD	B,I
Camden Co	19N	G	Lawrence Muni	LWM	D	Sky Acres	44N	B,I
Camp Peary Landing	W94	E	Lee	ANP	F	Sky Manor	N40	A,H
Cape Cod CGAS	FMH	D	Leesburg Exec	JYO	F	Sky Park	46N	B,I
Cape May Co	WWD	G	Lehigh Valley Intl	ABE	A,G	Skylark Arpk	7B6	C,I
Capital City	CXY	G	Lincoln Park	NØ7	A,H	Solberg-Hunterdon	N51	A,H
Carroll Co Rgnl/Jack	DMW	F	Linden	LDJ	A,H	Somerset	SMQ	A,H
Cecil Co	58M	G	Littlebrook Air Park	3B4	D	South Albany	4BØ	B,I
Central Jersey Rgnl	47N	A,H	Long Island Mac Arthur	ISP	B,I	South Jersey Rgnl	VAY	G
Charles G Kalko Pvt	7PA3	A	Louisa Co/Freeman	LKU	E	Southampton	87N	C,I
Chatham Muni	CQX	D	Manassas Rgnl/Harry	HEF	E	Southbridge Muni	3BØ	C,J
Cherry Ridge	N3Ø	A,H	Manchester	MHT	D	Spitfire Aerodrome	7N7	G
Chesapeake Ranch	MD5Ø	F	Mansfield Muni	1B9	D,J	Spring Hill	7ØN	A,H
Chester	SNC	C,I	Marshfield Muni	GHG	D	St Marys Co	2W6	E
Chester Co G O	MQS	G	Marthas Vineyard	MVY	D	Stafford Rgnl	RMN	E
Charman	D74	F	Martin State	MTN	F	Sterling	3B3	C,J
Clearview Arpk	2W2	F	Maryland	2W5	E	Stewart Intl	SWF	B,I
College Park	CGS	F	Mc Guire AFB	WRI	G	Stormville	N69	B,I
Columbia Co	1B1	B,I	Meriden Markham	MMK	B,I	Straudsburg-Pocono	N53	A,H
Crisfield Muni	W41	F	Middle Peninsula Rgnl	FYJ	E	Sullivan Co Intl	MSV	A,H
Cross Keys	17N	G	Millville Muni	MIV	G	Summit	EVY	G
Culpeper Rgnl	CJR	E	Minute Man Air Field	6B6	C,J	Sussex	FWN	A,H
Dahlgren Naval	NDY	E	Monmouth Exec	BLM	H	Sussex Co	GED	F
Danbury Muni	DXR	B,I	Montauk	MTP	C	Tangier Island	TGI	E
Danielson	LZD	C,J	Montgomery Co Arpk	GAI	F	Tanner-Hiller	8B5	C,J
Davison AAF	DAA	E	Morristown Muni	MMU	A,H	Tappahannock-Essex	XSA	E
Deck	9D4	G	Mount Snow	4V8	C	Taunton Muni-King Fld	TAN	D
Delaware Arpk	33N	F	Muir AAF	MUI	G	Teterboro	TEB	B,H
Dillant-Hopkins	EEN	C	Nantucket Mem	ACK	D	Theodore Francis	PVD	C,J
Dogwood Arpk Pvt	VA42	E	New Bedford Rgnl	EWB	D	Tipton	FME	F
Donegal Springs Arpk	N71	G	New Castle	ILG	G	Trenton Mercer	TTN	G
Dover AFB	DOV	F	New Garden	N57	G	Trenton-Robbinsville	N87	H
Doylestown	DYL	G	New Kent Co	W96	E	Turners Falls	ØB5	C,J
Dutchess Co	POU	B,I	Newark Liberty Intl	EWR	A,H	Tweed-New Haven	HVN	B,I
Eagles Nest	31E	G	Newport News	PHF	E	Upperville Pvt	2VG2	E
East Hampton	HTO	C,I	Newport State	UUU	C	Walter J Koladza	GBR	B,I
Easton/Newnam Fld	ESN	F	North Central State	SFZ	C,J	Warrenton Fauquier	HWY	E
Elizabeth Fld	ØB8	C,I	Northampton	7B2	C,J	Washington Dulles Intl	IAD	E
Essex Co	CDW	A,H	Northeast Philadelphia	PNE	G	Washington Exec	W32	F
Felker AAF	FAF	E	Norwood Mem	OWD	D,J	Waterbury-Oxford	OXC	B,I
Fitchburg Muni	FIT	C,J	Ocean City Muni	26N	G	Webster NOLF	NUI	E
Flying W	N14	G	Old Bridge	3N6	H	Weide AHP/Aberdeen	EDG	F
Forest Hill Pvt	MD31	F	Oneonta Muni	N66	A	Westchester Co	HPN	B,H
Francis S Gabreski	FOK	C,I	Orange Co	MGJ	B,H	Westerla Pvt	NY33	B,I
Frederick Muni	FDK	E	Orange Co	OMH	E	Westerly State	WST	C,I
Freeway	WØØ	F	Orange Muni	ORE	C,J	Westover ARB/Metro	CEF	C,J
Full Throttle Farm Pvt	23DE	F	Patuxent River NAS	NHK	E	Wilkes Barre/Scranton	AVP	A
Gardner Muni	GDM	C,J	Pennridge	CKZ	A,G	William H Morse State	DDH	B,J
General Edward	BOS	D,J	Perkiomen Valley	N1Ø	G	Williamsburg	JGG	E
Gettysburg Rgnl	WØ5	F	Philadelphia Intl	PHL	G	Willow Grove NAS	NXX	G
Greater Binghamton	BGM	A	Phillips AAF	APG	F	Windham	IJD	C,J
Greenwood Lake	4N1	A,H	Pittsfield Muni	PSF	B,I	Wings Fld	LOM	G
Groton-New London	GON	C,I	Plymouth Muni	PYM	D	Woodbine Muni	OBI	G
Hammonton Muni	N81	G	Pocono Mountains	MPO	A,H	Worcester Rgnl	ORH	C,J
Hanover Co Muni	OFP	E	Portsmouth Intl	PSM	D	Wurtsboro-Sullivan Co	N82	A,H
Harford Co	ØW3	F	Potomac Airfield	VKX	F	York	THV	F
Harriman-And-West	AQW	B,J	Pottstown Limerick	PTW	G			

L-33 PANELS ABCD 1"=7 NM

L-34 PANELS EFGHIJ 1"=7 NM

UNITED STATES GOVERNMENT
FLIGHT INFORMATION PUBLICATION

IFR ENROUTE LOW ALTITUDE - U.S.

For use up to but not including 18,000' MSL
HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983

LEGEND

AIRPORTS

Facilities in BLUE or GREEN have an approved Instrument Approach Procedure and/or RADAR MINIMA published in either the FAA Terminal Procedures Publications or the DoD FLIPs. Those in BLUE have an approved Instrument Approach Procedure and/or RADAR MINIMA published in at least in the High Altitude DoD FLIPs. Facilities in BROWN do not have a published Instrument Approach Procedure or RADAR MINIMA.

LAND: Civil; Civil - Military; Military; Heliport
SEA: Civil

1. A solid line box enclosing the airport name indicates FAR 93 Special Requirements-see Directory/Supplement.
2. "NO SVFR" above the airport name indicates FAR 91 fixed wing special VFR flight is prohibited.
3. [C] or [D] following the airport name indicates Class C or Class D Airspace.
4. Pvt - Private use
5. Associated city names for public airports are shown above or preceding the airport name. If airport name and city name are the same, only the airport name is shown. City names for military and private airports are not shown. The airport identifier in parentheses follows the airport name.

Airport Ident; ICAO Location Indicator shown outside contiguous U.S.; CITY Airport Name (APT) (ICAO) [D]* 280 ⓛ* 43s (A) *109.8; Airport Elevation; Automatic Terminal Information Service; Part-time; Frequency; Lighting Capability; Part-time or established by NOTAM. See Airport/Facility Directory for times of operation. In Alaska see Supplement Alaska; Longest runway length to nearest 100 feet with 70 feet as the dividing point (add 00); s indicates soft surface.

L Lighting available; ⓛ Pilot Controlled Lighting; * Part time or on request; — No lighting available; At private facilities ... indicates no lighting information is available.

NAVAIDS AND COMMUNICATION BOXES

NAVAIDS

VHF/UHF Data is depicted in BLACK
LF/MF Data is depicted in BROWN

COMPASS ROSES Oriented to Magnetic North of NAVAID which may not be adjusted to the charted isogonic values. Smaller sizes are used in congested areas.

VOR; VOR/DME; TACAN; VORTAC

LF/MF Non-directional Radiobeacon or Marine Radiobeacon with magnetic north indicator

UHF Non-directional Radiobeacon

LF/MF Non-directional Radiobeacon/DME

Compass Locator Beacon

Flight Service Station (FSS), Remote Communications Outlet (RCO) or Automated Weather Observing Station (ASOS/AWOS) not associated with a charted NAVAID or airport

ILS Localizer Course with additional navigation function

COMMUNICATION BOXES

NAME (T) 000.0 IDT 000(Y) — VOR with TACAN compatible DME

Underline indicates No Voice transmitted on this frequency. TACAN Channels are without voice but not underlined.

Crosshatch indicates Shutdown status

(T) Frequency protection usable range at 12,000' AGL - 25NM

(Y) TACAN must be placed in "Y" mode to receive distance information

NAME 000 IDT (000.0) — TACAN Channel paired with VHF Frequency in parenthesis.

Automated Weather Broadcast Systems: ASOS/AWOS, HIWAS, TWEB

Automated weather, when available, is broadcast on the associated NAVAID frequency

NAME ASOS 000.0 — Stand Alone ASOS/AWOS

Part Time or On Request — NAME *000 IDT 00(000.0)

LF/MF Non-directional Radiobeacon/DME VHF Freq paired with TACAN Channel

TACAN FIX DATA: Ident; Chan; Bearing from TACAN; Distance from TACAN

000.0 NAME 000.0 IDT 000 — FSS name. Freq(s) positioned above thin line NAVAID box is remoted to the NAVAID site. Other freq(s) at the named FSS radio are available, however, altitude and terrain may determine their reception.

Thin line NAVAID boxes without freq(s) and FSS radio name indicates no freq(s) available.

Shadow NAVAID box indicates NAVAID and Flight Service Station (FSS) have same name

NAME IDT — FSS name and identifier not associated with NAVAID

NAME 000.0 — Remote Communications Outlet (RCO). FSS radio name and remoted freq(s) are shown.

SHADOW BOXES indicate Flight Service Stations (FSS). Frequencies 122.2, 255.4 and emergency 121.5 and 243.0 (Canada-121.5, 126.7 and 243.0) are available at many FSSs and are not shown. All other frequencies are shown. Certain FSSs provide Airport Advisory Service, see A/FD. Frequencies transmit and receive except those followed by R or T: R - Receive only; T - Transmit only

AIR TRAFFIC SERVICES AND AIRSPACE INFORMATION

ROUTE DATA

VHF/UHF Data is depicted in BLACK
LF/MF Data is depicted in BROWN
RNAV Route Data is depicted in BLUE

V0 — VOR Airway
A0 — LF/MF Airway
A0 — Uncontrolled LF/MF Airway
A0 — Oceanic Route
ATS Route
T000 — Low Altitude RNAV Route GNSS required
Substitute Route — Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information
Unusable Route Segment
V0 — Preferred Single Direction Route
EVEN — Direction of Flight Indicator (Canada only)
000.0 IDT 000 / 000 ID — Facility Locators used in formation of Reporting Points
000 — Radial outbound from a VHF/UHF NAVAID
000 — Bearing inbound to an LF/MF NAVAID
000 — Magnetic Reference Bearing, outbound from a NAVAID or Fix
000 000 — Total Mileage between Compulsory Fixes and/or NAVAIDS
00 00 00 — Mileage between other Fixes, NAVAIDS and/or Mileage Breakdown

00 00 — Changeover Point giving mileage to NAVAIDs (Not shown at midpoint locations)
*0000 *0000 — Minimum Obstruction Clearance Altitude (MOCA)
0000 0000 — Minimum Enroute Altitude (MEA)
0000G — GNSS RNAV MEA
MAA-00000 — Maximum Authorized Altitude (MAA)
MEA, MOCA and/or MAA Change at other than NAVAIDs
Minimum Reception Altitude (MRA)
Minimum Crossing Altitude (MCA)
Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 14000' 175K applies to all altitudes

FIXES/ATC REPORTING REQUIREMENTS

Fix Compulsory and Non Compulsory Position Report
RNAV Waypoint Compulsory and Non Compulsory Position Report
Denotes DME Fix (Distance same as route mileage)
Denotes DME Fix and Mileage
Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)
Mileage Breakdown or Computer Navigational Fix (CNF)

BOUNDARIES

Air Route Traffic Control Center (ARTCC)
ARTCC Remoted Sites with discrete VHF and UHF frequencies
Flight Information Region (FIR)
Type of Area; Traffic Service; Ceiling; Floor
Air Defense Identification Zone (ADIZ)
12⁵ — Off Route Obstruction Clearance Altitudes (OROCA) Example: 12,500 feet
International Boundary (Not shown when coincident with ARTCC or FIR)
US/Russia Maritime Boundary
Area of Enlargement (contains only data for through flights) See Area Charts for complete data
Official Time Zone
International Date Line

AIRSPACE INFORMATION

Open area (white) indicates controlled airspace (Class E) unless otherwise indicated
All airspace 14,500' and above is controlled (Class E)
Shaded area (brown) indicates uncontrolled airspace below 14,500' (Class G)
In Canada - Indicates Class B Airspace above 12,500'
Oceanic Control Area (CTA)
Additional Control Area limit
Class B Airspace; Class C Airspace; Mode C Area See FAR 91.215

EXAMPLE OF GROUPING

Magnetic Reference Bearings will not be shown on joint Victor/RNAV routes.
Reporting Points (coordinates are shown for offshore and holding fixes)
Airway Restriction (airway penetrates Prohibited & Restricted Airspace)
MEA is established with a gap in navigation signal coverage
Water Vignette

SPECIAL USE AIRSPACE

P - Prohibited Area
R - Restricted Area
W - Warning Area
A - Alert Area
MOA - Military Operations Area
In Canada:
CYA Advisory Area
CYD Danger Area
CYR Restricted Area
Line delimits internal separation of same Special Use Area
See Airspace Tabulation for complete information

MILITARY TRAINING ROUTES (MTRs)

MTRs 5 NM or less both sides of centerline
MTRs greater than 5 NM either or both sides of centerline
Arrow indicates direction of route
See MTR tabs for altitude range information
All IR and VR MTRs are shown except those VRs at or below 1500' AGL
CAUTION: Inset charts do not depict MTRs

CRUISING ALTITUDES - U.S.

IFR within controlled airspace as assigned by ATC
IFR EVEN Thousands; VFR or ON TOP EVEN Thousands Plus 500'
IFR ODD Thousands; VFR or ON TOP ODD Thousands Plus 500'
VFR above 3000' AGL unless otherwise authorized by ATC
IFR outside controlled airspace
All courses are magnetic

MISCELLANEOUS

ALTIMETER Altimeter setting change
2005 Isogonic Line and Value
All Mileages are Nautical except as noted.
All Radials and Bearings are magnetic except as noted.
All Altitudes are MSL except as noted.
All Time is Coordinated Universal Time (UTC), Days are local
‡ During periods of Daylight Saving Time (DT), effective hours will be one hour earlier than shown. All states observe DT except Arizona and Hawaii.
North American Datum of 1983 (NAD 83), for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

FOR ADDITIONAL SYMBOL INFORMATION REFER TO THE CHART USER'S GUIDE

US L-33 (BLACK PLATE) US L-33 (BROWN PLATE) US L-33 (BLUE PLATE) US L-33 (GREEN PLATE)